

WATCHING THE TRANSIT.

THE VARIED SUCCESS OF OBSERVERS IN
THIS AND OTHER COUNTRIES.

The reports received yesterday of the observations of the transit of Venus show that some of the astronomers, from whom incomplete statements or none at all were published yesterday morning, met with success beyond their anticipations. The observers on the Pacific coast had exceptional opportunities. Prof. Davidson, in charge of a Government party at Fort Selden, New-Mexico, telegraphs: "The day opened beautifully clear. The sun was not one diameter above the mountains when the first internal contact was observed, being much later than the predicted time. The atmosphere at this low altitude was very unsteady. The atmosphere of Venus was seen outside the sun's limbs. The second contact (internal) was satisfactorily observed, the atmosphere growing steady. Micrometer measurements were then made between the limbs of the sun and Venus. These were satisfactory. During these measurements the first group of six photograph plates was exposed, and gave sharp outlines, exhibiting the planet very well defined. After the planet had advanced one diameter on the body of the sun photograph plates were exposed in groups of six every eight minutes. These photographs are remarkably fine, and no single hitch occurred throughout the whole series. While this work was being done micrometer measurements of the polar and equatorial diameter of Venus were made with a double-image micrometer in equatorial and transit instruments. The meridian transit of the first limb of Venus and the last limb of the sun were observed. Photographs of the groups were finished in about 20 minutes before the third contact, and give 216 splendid pictures. When micrometer measurements were made between the limb of the planet and of the sun, the third contact (internal) was observed with great precision, the limbs of Venus and the sun being remarkably sharp and well defined. After this contact part of the planet's disk beyond the sun's border was partly surrounded by a white circle of light. The last contact was also observed with great precision. The whole work has been an eminent success, and not a single item was missed in the programme of the day's work."

The French party at St. Augustine, Fla., had clear weather Wednesday, and Col. Perrier obtained good and complete observations. At Carlson College Observatory, at Northfield, Minn., clouds obscured the sun until 11 o'clock. The third contact only was fairly witnessed. The observations at the Denver University were unsatisfactory. Venus was seen at her egress through thin clouds. At Middletown, Conn., Prof. Van Vleeh, of Wesleyan University, observed only the two internal contacts, at 9:16:27 and 2:39:25, Washington time. The transit was easily seen at St. John, Newfoundland.

The day was wonderfully bright and clear at Panama, and the transit was distinctly seen, with the exception of a moment or two, when the sun's face was clouded. Despite cloudy weather at Chapultepec, Mexico, 13 photographs were taken. M. Bernquet de la Grye, Chief of the French commission in Puebla, reports that his party observed the transit with entire success. The American observers in New-Zealand obtained successful observations. Good results were had, also, in Tasmania and New South Wales. In Melbourne 13 photographs were obtained. Observers in Queensland and Sydney were unsuccessful. The American observers at Cape Town met with good success. At Potsdam, Prussia, good photographs were obtained.

LONDON, Dec. 7.—The Directing Astronomer of the Royal Society at the Oxford Observatory has received a telegram from Jamaica stating that all four contacts of the planet Venus were observed there.